AMENDMENTS

IN THE CLAIMS:

Please cancel claims ~~1-16, 30, 33, 35, 38-42~~ and ~~45-49~~.

Please add new claims 50-74 as follows:

50. (New) A method of detecting a target polynucleotide indicative of breast cancer in a test sample comprising:

(a) contacting the test sample with at least one diagnostic polynucleotide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, and complete complements thereof;

(b) detecting a presence of the target polynucleotide indicative of breast cancer in the test sample.

51. (New) The method of claim 50, further comprising:

attaching the target polynucleotide to a solid phase.

52. (New) A method for detecting mRNA of a target polynucleotide indicative of breast cancer in a test sample, said method comprising:

(a) performing reverse transcription on said sample using at least one primer in order to produce cDNA;

(b) amplifying the cDNA obtained from step (a) using at least one sense primer oligonucleotide and at least one antisense primer oligonucleotide to obtain an amplicon, wherein the primer oligonucleotides have a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2 and complete complements thereof; and

(c) detecting a presence of the amplicon in the test sample, wherein the presence of the amplicon indicates detection of the target polynucleotide indicative of breast cancer in the test sample.

53. (New) The method of claim 52, further comprising:

reacting the test sample with a solid phase prior to performing one of steps (a), (b) or (c).

54. (New) The method of claim 53, further comprising:

utilizing a detectable label capable of generating a measurable signal.

55. (New) A method of detecting a target polynucleotide indicative of breast cancer in a test sample suspected of containing said target polynucleotide, comprising:

(a) contacting the test sample with at least one sense primer oligonucleotide and at least one anti-sense primer oligonucleotide and amplifying to obtain a first stage reaction product;

(b) contacting the first stage reaction product with at least one other oligonucleotide to obtain a second stage reaction product, with the proviso that the other oligonucleotide is located 3' to the oligonucleotides utilized in step (a) and is complementary to the first stage reaction product; and

(c) detecting the second stage reaction product as an indication of a presence of the target polynucleotide indicative of breast cancer in the test sample, wherein the oligonucleotides utilized in steps (a) and (b) are selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2 and complete complements thereof.

56. (New) The method of claim 55, further comprising:

reacting the test sample with a solid phase prior to performing one of steps (a), (b) or (c).

57. (New) The method of claim 55, further comprising:

utilizing a detectable label capable of generating a measurable signal.

58. (New) The method of claim 57, further comprising:

reacting the detectable label with a solid phase.

59. (New) A test kit useful for detecting a target polynucleotide indicative of breast cancer in a test sample, comprising:

a container containing at least one polynucleotide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2 and complete complements thereof.

60. (New) The test kit of claim 59 further comprising:

tools useful for collection of the sample, the tools selected from the group consisting of lancets, absorbent paper, cloth, swabs and cups.

61. (New) A purified polynucleotide selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.

62. (New) The purified polynucleotide of claim 61 wherein said polynucleotide is produced by recombinant techniques.

63. (New) The purified polynucleotide of claim 61 wherein said polynucleotide is produced by synthetic techniques.

64. (New) The purified polynucleotide of claim 61 wherein said polynucleotide comprises a sequence encoding at least one epitope.

65. (New) A recombinant expression system comprising:

a nucleic acid sequence that includes an open reading frame operably linked to a control sequence compatible with a desired host, wherein said nucleic acid sequence is selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2 and complete complements thereof.

66. A cell transfected with the recombinant expression system of claim 65.

67. A cell transfected with a nucleic acid sequence encoding at least one epitope, wherein said nucleic acid sequence is selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, and complete complements thereof.

68. A composition of matter comprising a polynucleotide, the polynucleotide selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2 and complete complements thereof.

69. (New) A purified polynucleotide having a sequence selected from the group consisting of SEQ ID NO:4, SEQ ID NO:5 and complete complements thereof.

70. (New) A method of detecting a target polynucleotide indicative of breast cancer in a test sample comprising:

(a) contacting the test sample with at least one diagnostic polynucleotide selected from the group consisting of SEQ ID NO:4, SEQ ID NO:5, and complete complements thereof;

(b) detecting a presence of the target polynucleotide indicative of breast cancer in the test sample.

71. (New) A method for detecting mRNA of a target polynucleotide indicative of breast cancer in a test sample, said method comprising:

(a) performing reverse transcription on said sample using at least one primer in order to produce cDNA;

(b) amplifying the cDNA obtained from step (a) using at least one sense primer oligonucleotide and at least one antisense primer oligonucleotide to obtain an amplicon, wherein the primer oligonucleotides have a sequence selected from the group consisting of SEQ ID NO:4, SEQ ID NO:5 and complete complements thereof; and

(c) detecting a presence of the amplicon in the test sample, wherein the presence of the amplicon indicates detection of the target polynucleotide indicative of breast cancer in the test sample.

72. (New) A method of detecting a target polynucleotide indicative of breast cancer in a test sample suspected of containing said target polynucleotide, comprising:

(a) contacting the test sample with at least one sense primer oligonucleotide and at least one anti-sense primer oligonucleotide and amplifying to obtain a first stage reaction product;

(b) contacting the first stage reaction product with at least one other oligonucleotide to obtain a second stage reaction product, with the proviso that the other oligonucleotide is located 3' to the oligonucleotides utilized in step (a) and is complementary to the first stage reaction product; and

(c) detecting the second stage reaction product as an indication of a presence of the target polynucleotide indicative of breast cancer in the test sample, wherein the oligonucleotides utilized in steps (a) and (b) are selected from the group consisting of SEQ ID NO:4, SEQ ID NO:5 and complete complements thereof.

73. (New) A test kit useful for detecting a target polynucleotide indicative of breast cancer in a test sample, comprising:

a container containing at least one polynucleotide selected from the group consisting of SEQ ID NO:4, SEQ ID NO:5 and complete complements thereof.

74. (New) A composition of matter comprising a polynucleotide, the polynucleotide selected from the group consisting of SEQ ID NO:4, SEQ ID NO:5 and complete complements thereof.